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(54) **SUBSTRATE FOR SEMI-CONDUCTOR DEVICE
AND METHOD OF PRODUCTION OF THE
SUBSTRATE**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a substrate for a semiconductor device in which the COP on the surface is removed by heat treatment and haze does not exist on the surface or even when it does, it is uniform and a production method thereof.

SOLUTION: The substrate for a semiconductor device is a silicon single crystal substrate having its main surface close to the (001) plane. The main surface of the substrate is inclined at an angle in the range of $(0.04^\circ)^2 \leq X^2 + Y^2 \leq (0.03^\circ)^2$, whereas the main surface angle to the direction to the [110] plane is X and to the [1-10] plane is Y. The oxygen concentration at the depth of 1 μm from the surface of the substrate is less than 10% of oxygen concentration in the central part of the substrate.

$$(0.04^\circ)^2 \leq X^2 + Y^2 \leq (0.03^\circ)^2$$

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